

REMARKS

Claims 3 - 8 have been amended in order to more particularly point out, and distinctly claim the subject matter to which the applicants regard as their invention. It is believed that this Amendment is fully responsive to the Office Action dated December 19, 2002.

In response to the objection to Figure 10, one substitute drawing sheet (Figure 10) is enclosed herewith for approval by the Examiner. Approval of the substitute drawing (Figure 10), and removal of the objection to the drawing is respectfully requested.

As to the merits of this case, claims 1 - 8 are rejected under 35 USC §102(e) as being anticipated by Algots et al. (U.S. Patent No. 6,192,064). The applicants respectfully request reconsideration of this rejection.

Regarding claims 1 - 2, Algots' Figure 9A is describes, at column 7, lines 30 - 34, as a piezoelectric element unit 14D mounted in series with a pulse motor unit 15 to pivot a mirror 14C about a pivot point 80A. Accordingly, we would very much appreciate receiving your or the applicants' comments on how the applicants' claimed invention, as set forth in claims 1 and 2, is to be distinguished over the teachings of Algots.

As to claims 3 - 8, the Examiner alleges that a wavelength monitor 22 for monitoring the wavelength of the laser light is shown, and that the remainder of the limitations in claims 3 - 8 are concerned with a general operation of the device that will necessarily occur in Algots as the claimed structure is identical to the prior art structure. The Examiner states that process limitations cannot impart patentability to a product claim where the product is not patentably distinguished over the prior art.

In view of the Examiner's position with regard to process limitations, the applicants have amended the claims to recite a "laser controller means" for operating the first drive mechanism and the second drive mechanism in the manner described in the present specification. In this manner, such claimed structural element is directed to a structural limitation, and should therefore be given patentable weight by the Examiner. In particular, claims 3 and 4 have been amended to be in independent form and to include the above-mentioned laser controller means.

Each of claims 5 and 6 has also been amended in order to be in independent form. As disclosed in the specification, in the applicants' claimed invention, as set forth in claims 5 and 6, the first drive mechanism and the piezoelectric element unit are capable of response at a high speed, but they have shorter strokes; and therefore they sometimes require an operation of returning them to a neutral position. Such significant advantages or benefits derived from the applicants' claimed invention, as now set forth in claims 5 and 6, are not disclosed or suggested in the cited prior art.

U.S. Patent Application Serial No. 09/819,745

In view of the above applicants' comments and claim amendments, as filed, not all of the applicants' claimed elements or features are found in exactly the same situation and united in the same way to perform the identical function in Algots' apparatus. Thus, there can be no anticipation under 35 USC §102(e) of the applicants' claimed invention based on the teachings of Algots. Thus, the withdrawal of the outstanding anticipation rejection under 35 USC §102(e) based on Algots et al. (U.S. Patent No. 6,192,064) is in order, and is therefore respectfully solicited.

In view of the aforementioned amendments and accompanying remarks, claims, as amended, are in condition for allowance, which action, at an early date, is requested.

If, for any reason, it is felt that this application is not now in condition for allowance, the Examiner is requested to contact the applicants' undersigned attorney at the telephone number indicated below to arrange for an interview to expedite the disposition of this case.

Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached page is captioned "**Version with markings to show changes made.**"

U.S. Patent Application Serial No. 09/819,745

In the event that this paper is not timely filed, the applicants respectfully petition for an appropriate extension of time. Please charge any fees for such an extension of time and any other fees which may be due with respect to this paper, to Deposit Account No. 01-2340.

Respectfully submitted,

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PATENT TRADEMARK OFFICE

Enclosures: Version with markings to show changes made
Request for Approval of Substitute Drawing w/One (1) Sheet of Drawings (Figure 10)

H:\HOME\MEL\TRANSFER\010381 AMENDMENT due 3-19-03

IN THE CLAIMS:

Amend claims 3 - 8 as follows:

3. (Amended) [The] A wavelength control device for a laser device [in accordance with Claim 1,] including a movable holder for making an optical component movable with respect to a laser optical axis, and

a laser controller means for moving said optical component with respect to the laser optical axis and changing an incident angle of laser light on a band narrowing optical component to thereby control a center wavelength of the laser light to be a target wavelength, wherein

said movable holder comprises a first drive mechanism moving by a very short distance and a second drive mechanism moving by a longer distance than said first drive mechanism, and

on moving said optical component, said laser controller means moves said optical component by means of said first drive mechanism, and thereafter, moves said optical component by means of said second drive mechanism.

4. (Amended) [The] A wavelength control device for a laser device [in accordance with Claim 2,] including

a movable holder for making an optical component movable with respect to a laser optical axis, and

VERSION WITH MARKINGS TO SHOW CHANGES MADE 09/819,745 (2)

a laser controller means for moving said optical component with respect to the laser optical axis and changing an incident angle of laser light on a band narrowing optical component to thereby control a center wavelength of the laser light to be a target wavelength, wherein
said movable holder comprises a first drive mechanism moving by a very short distance and a second drive mechanism moving by a longer distance than said first drive mechanism, and
on moving said optical component, said laser controller means moves said optical component by means of said piezoelectric element unit, and thereafter, moves said optical component by means of said pulse motor unit.

5. (Amended) [The] A wavelength control device for a laser device [in accordance with Claim 1], including a movable holder for making an optical component movable with respect to a laser optical axis, and a laser controller for moving said optical component with respect to the laser optical axis and changing an incident angle of laser light on a band narrowing optical component to thereby control a center wavelength of the laser light to be a target wavelength,
wherein said movable holder comprises a first drive mechanism moving by a very short distance and a second drive mechanism moving by a longer distance than said first drive mechanism,

wherein said laser controller means moves said optical component by means of said first drive mechanism to set the center wavelength at the predetermined target wavelength, and

compensates for a positional change of said optical component caused by returning said first drive mechanism to a neutral position by means of said second drive mechanism, in a state in which the center wavelength is set at the target wavelength, at the same time that the laser controller returns said first drive mechanism to the neutral position.

6. (Amended) The wavelength control device for the laser device [in accordance with Claim 2], including a movable holder for making an optical component movable with respect to a laser optical axis, and a laser controller for moving said optical component with respect to the laser optical axis and changing an incident angle of laser light on a band narrowing optical component to thereby control a center wavelength of the laser light to be a target wavelength.

wherein said movable holder comprises a first drive mechanism moving by a very short distance and a second drive mechanism moving by a longer distance than said first drive mechanism.

wherein said first drive mechanism comprises a piezoelectric element unit.

wherein said second drive mechanism comprises a pulse motor unit, and

wherein said laser controller means moves said optical component by means of said piezoelectric element unit to set the center wavelength at the predetermined target wavelength, and compensates for a positional change of said optical component caused by returning said piezoelectric element unit to a neutral position by means of said pulse motor unit, in a state in

which the center wavelength is set at the target wavelength, at the same time that the laser controller returns said piezoelectric element unit to the neutral position.

7. (Amended) The wavelength control device for the laser device in accordance with any one of [Claim 1,] Claim 3[,] and Claim 5, further comprising:

a wavelength monitor for monitoring the center wavelength of the laser light,

wherein on resuming laser oscillation after stopping the laser oscillation for more than a predetermined period of time, said laser controller means drives said second drive mechanism and thereby changes a position of said optical component with respect to the laser optical axis previously while the oscillation is stopped, based on the target wavelength after resuming the oscillation, and drives said movable holder by means of said first drive mechanism and thereby changes the position of said optical component with respect to the laser optical axis again, immediately after resuming the oscillation, based on the center wavelength of the laser light monitored by said wavelength monitor.

8. (Amended) The wavelength control device for the laser device in accordance with any one of [Claim 2,] Claim 4[,] and Claim 6, further comprising:

a wavelength monitor for monitoring the center wavelength of the laser light,

wherein on resuming laser oscillation after stopping the laser oscillation for more than a predetermined period of time, said laser controller means drives said pulse motor unit and

VERSION WITH MARKINGS TO SHOW CHANGES MADE 09/819,745 (5)

thereby changes a position of said optical component with respect to the laser optical axis previously while the oscillation is stopped, based on the target wavelength after resuming the oscillation, and drives said movable holder by means of said piezoelectric element unit and thereby changes the position of said optical component with respect to the laser optical axis again, immediately after resuming the oscillation, based on the center wavelength of the laser light monitored by said wavelength monitor.